



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,416	03/02/2005	Matthew M Terry	00820-03	3094
34444	7590	05/11/2006	EXAMINER	
UNIVERSITY OF VIRGINIA PATENT FOUNDATION 250 WEST MAIN STREET, SUITE 300 CHARLOTTESVILLE, VA 22902			JOHNSON, STEPHEN	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/526,416	TERRY ET AL.	
	Examiner	Art Unit	
	Stephen M. Johnson	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7, 8/7, 9-11, 15/7, 21/7, 22/7, 23/7, 24/7, 25/7, and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 1-6, 8-1-8/6, 12-14, 15/1-15/6, 16-20, 21/2, 21/4, 21/6, 22/2, 22/4, 22/6, 23/3, 23/4, 23/5, 23/6, 24/3, 24/4, 24/5, 24/6, 25/3, 25/4, 25/5, 25/6, and 26-31.

Art Unit: 3641

1. Applicant's election without traverse of species D, illustrated in fig. 4, in the reply filed on 5/1/2006 is acknowledged.

Claims 7, 8/7, 9-11, 15/7, 21/7, 22/7, 23/7, 24/7, 25/7, and 32 read on the elected species and an action on these claims follows.

Claims 1-6, 8/1-8/6, 12-14, 15/1-15/6, 16-20, 21/2, 21/4, 21/6, 22/2, 22/4, 22/6, 23/3, 23/4, 23/5, 23/6, 24/3, 24/4, 24/5, 24/6, 25/3, 25/4, 25/5, 25/6, and 26-31 are withdrawn from consideration as being directed to non-elected species.

Note that claim 12 claims a **separate** textile layer including an array of intersecting structural support members forming apertures. The elected embodiment (fig. 4) lacks this feature.

2. Claims 9-11, 21/7, 22/7, 23/7, 24/7, and 25/7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, what structural elements are intended to be inclusive in the terminology "other non-limiting arrangements" is not understood. In claim 9, line 1; and in claim 10, line 1; the phrase "said truss units" lacks an antecedent. In claims 23 and 25, what types of glass and fabric are intended by the phrases "S2 glass fabric" and "Zylon fabric". In claims 23 and 25, the term "combination thereof" should be (combinations thereof).

In claims 21/7, 22/7, 23/7, 24/7, and 25/7, the terminology "comprise at least one of" should be claimed as (selected from the group consisting of) and use of the term (and) rather than "and/or" or "or".

Art Unit: 3641

3. Claims 22/7, 23/7, 24/7, and 25/7 contain the trademark/trade name “Kevlar”, “Spectra”, “S2”, and “Zylon”. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a constituent material of the protection structure and, accordingly, the identification/description is indefinite.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7, 21/7, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Burke (299).

Burke (299) discloses a protective structure comprising:

- | | |
|--|----|
| a) an open cell core structure; | 14 |
| b) a top face sheet; | 24 |
| c) a bottom face sheet; | 26 |
| d) a projectile arresting structure; and | 16 |
| e) a fragment catching structure. | 18 |

Art Unit: 3641

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 7, 8/7, 9-11, 15/7, 21/7, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Day et al. (381).

Day et al. disclose a protective structure comprising:

- | | |
|--|----------|
| a) an open cell core structure; | 86, 83 |
| b) truss units; | 86 |
| c) a top face sheet; | 87 |
| d) a bottom face sheet; | 87 |
| e) a projectile arresting structure; and | 84 or 85 |
| f) a fragment catching structure. | 84 or 85 |

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 23/7, 24/7, and 25/7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Day et al. (381) in view of Toni et al. (096).

Day et al. (381) apply as previously recited. However, undisclosed are arresting layers

Art Unit: 3641

and/or fabric catching layers of Kevlar. Toni et al. (096) teach arresting layers and/or fabric catching layers of Kevlar (col. 5, lines 60-62). Applicant is substituting one material type of arresting layer for another in an analogous art setting as explicitly encouraged by the secondary reference (see col. 5, lines 53-62 of Toni et al.). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Toni et al. to the the Day et al. protective structure and have a protective structure with a particular material type of arresting or catching layer.

9. Claim 22/7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Day et al. (381) in view of Strasser et al. (843).

Day et al. (381) apply as previously recited. However, undisclosed are arresting layers and/or fabric catching layers of ceramic. Strasser et al. (843) teach arresting layers and/or fabric catching layers of ceramic (col. 5, lines 50-52). Applicant is substituting one material type of arresting layer for another in an analogous art setting as explicitly encouraged by the secondary reference (see col. 5, lines 45-57 of Strasser et al.). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Strasser et al. to the the Day et al. protective structure and have a protective structure with a particular material type of arresting or catching layer.

10. Claims 7, 8/7, 9-11, 15/7, 21/7, 23/7, 24/7, 25/7, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Toni et al. (096).

Toni et al. disclose a protective structure comprising:

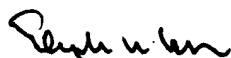
- | | |
|---------------------------------|--------|
| a) an open cell core structure; | 24, 26 |
| b) truss units; | 24, 26 |

- | | |
|---------------------------------------|---------------------|
| c) a top face sheet; | 20 |
| d) a bottom face sheet; | 22 |
| e) a projectile arresting structure; | 30 or 32 |
| f) a fragment catching structure; and | 30 or 32 |
| g) a Kevlar material. | col. 5, lines 54-62 |

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877 and whose e-mail address is (Stephen.Johnson@uspto.gov). The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The Central FAX phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.



STEPHEN M. JOHNSON
PRIMARY EXAMINER

Stephen M. Johnson
Primary Examiner
Art Unit 3641

SMJ
May 9, 2006